

Q.P. Code: 102389

Reg. No.:.....

**First Semester M.Sc. Audiology Degree Regular/Supplementary
Examinations November 2024**

A 102: Technology in Audiology

Time: 3 hrs

Max marks: 80

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays

(5x16=80)

1. Differentiate between pre amplifier and power amplifier. State and explain the important characteristics of loudspeakers.
2. Explain the different stages involved in conversion of a digitized speech signal back to a continuous signal. Compare the merits and limitations of IIR and FIR filters
3. How is CIS type of speech processing implemented in a cochlear implant system. Mention the limitations. How these limitations are corrected in the CIS + strategy. Explain any one technique of noise control in hearing aids.
4. Explain the principle with which middle ear analyzer measures the acoustic impedance of middle ear. Discuss the factors to be considered while constructing an audiometric test room.
5. Illustrate with a block diagram, the basic principle of operation of an MRI Imaging system. Discuss the advantages of functional MRI over conventional MRI.
